

IN THE SPECIFICATION:

Please amend the specification as follows:

Amend lines 19 through 23 on page 3 as follows:

Sub B1
Q1
said catalyst contains at least one element ~~type~~ selected from alkaline metal and alkaline earth metal, Rh, Pt, and a CO absorbent component where the absolute value (ΔH) of Co adsorbent enthalpy on the metal single crystal (111) surface is 142 KJ/mol or more;

Amend lines 8 through 12 on page 4 as follows:

Sub B2
Q2
3. ~~An exhaust gas cleaning method for internal combustion engine~~ characterized in that said catalyst contains at least one ~~type~~ element selected from Ti, Si and Zr, and includes a composite oxide comprising said type(s) and at least one ~~type~~ element selected from Na, Mg, K, Li, Cs, Sr and Ca.

Amend lines 17 through 23 on page 4 as follows:

Sub B3
Q3
said exhaust gas cleaning method for internal combustion engine being characterized in that said catalyst contains at least one ~~type~~ element of alkaline metal or alkaline earth metal selected from Na, Mg, K, Li, Cs, Sr and Ca

A3
(H) on the surface of a porous carrier, Rh, Pt, at least one type element selected from Zr and Ti and Si, and at least one type element selected from Pd, Ir ~~and~~ and Ru;

Amend lines 8 through 27 on page 5 as follows:

Sub 34
A4
7. An exhaust gas cleaning catalyst for internal combustion engine which comprises at least one type element selected from alkaline metal or alkaline earth metal, Rh, Pt and the CO adsorbent component where the absolute value (ΔH) of Co adsorbent enthalpy on the metal single crystal (111) surface is 142 KU/mol or more, and where the CO desorption temperature reaches the maximum level within the temperature range from 200 to 220°C in the event of temperature rise in He gas flow at the rate of 5 to 10°C/min. after adsorption of CO to said catalyst by saturation at 100°C.

8. An exhaust gas cleaning catalyst for internal combustion engine wherein said CO adsorbent compound comprises at least one type element selected from Na, Mg, K, Li, Cs, Sr and Ca, and contains a composite oxide comprising said element(s) and at least one type element selected from Zr and Ti and Si.

Amend lines 3 through 17 on page 6 as follows:

Sub 35
A5
11. An exhaust ~~gas~~ cleaning catalyst for internal combustion engine which has on the surface of a porous carrier at least one type element selected

80035
AS
from alkaline metal and alkaline earth metal, Rh, Pt, at least one type element selected from Ti, Si and Zr, and at least one type element selected from Pd, Ir and Ru; wherein said alkaline metal or alkaline earth metal comprises at least one type element selected from Na, Mg, K, Li, Cs, Sr and Ca;

AS
the ratios of components relative to 100 parts by weight of said porous carrier are 5 to 30 pts. wt. for alkaline metal or alkaline earth metal in total, 8 to 35 100 pts. wt. for Ti, 3 to 25 pts. wt. for Si, 3 to 25 pts. wt. for Zr, 0.05 to 0.5 pts. wt. for Rh, 1.5 to 5 pts wt. for Pt, and 0.25 to 3 pts. wt. for at least one type element selected from Pd, Ir and Ru in total.

Amend lines 5 through 24 on page 7 as follows:

Sub B6
A6
said exhaust gas cleaning device further characterized in that said exhaust gas cleaning catalyst contains at least one type element selected from alkaline metal and alkaline earth metal, Rh, Pt, and CO adsorbent component wherein the absolute value (ΔH) of CO adsorbent enthalpy on the metal single crystal (111) surface is 142 KJ/mol or more, and where the CO desorption temperature reaches the maximum level within the temperature range from 200 to 220°C in the event of temperature rise in He gas flow at the rate of 5 to 10°C/min. after adsorption of Co to said catalyst by saturation at 100°C.

14. An exhaust gas cleaning device for internal combustion engine wherein said CO adsorbent component comprises at least one type element selected from Pd, Ir and Ru.

15. An exhaust gas cleaning device for internal combustion engine wherein said alkaline metal or alkaline earth metal comprises at least one type element selected from Na, Mg, K, Li, Cs, Sr and Ca, and contains a composite oxide comprising said element(s) and at least one type element selected from Zr and Ti and Si.

Amend lines 9 through 21 on page 8 as follows:

wherein said catalyst further contains on the surface of a porous carrier at least one type element selected from alkaline metal and alkaline earth metal, Rh, Pt, at least one type element selected from Ti, Si and Zr, and ~~and~~ at least one type element selected from Rh, Pt and Ru;

said exhaust gas cleaning device further characterized in that the ratios of components relative to 100 parts by weight of said porous carrier are 5 to 30 pts. wt. for alkaline metal or alkaline earth metal in total, 8 to 35 ~~100~~ pts. wt. for Ti, 3 to 25 pts. wt. for Si, 3 to 25 pts. wt. for Zr, 0.05 to 0.5 pts. wt. for Rh, 1.5 to 5 pts. wt. for Pt, and 0.25 to 3 pts. wt. for at least one type element selected from Pd, Ir and Ru in total;

Amend lines 7 through 21 on page 9 as follows:

Sub B8
a
According to the present invention, alkaline metal or alkaline earth metal causes ~~NOx~~ NOx to be captured on the catalyst surface in the oxidation atmosphere. Then, a composite oxide comprising said alkaline metal, alkaline earth metal, and at least one ~~type~~ element selected from Ti, Zr and Si, ~~or makes it possible to capture~~ NOx in the oxidation atmosphere is firmly ~~captured~~ on the catalyst surface. Pt and Rh serve as an NOx reducing agent. They ~~removes~~ remove by reduction the NOx remaining captured onto the NOx capturing compound surface in the oxidation atmosphere by means of the reducing agent such as HC, CO and H₂ coexisting in exhaust gas in the reduction atmosphere. The CO adsorbent compound acts to remove by reduction the SOx captured by the capturing compound, using the reducing agent such as CO, HC and H₂ contained in the exhaust gas of reduction atmosphere.

Amend the first paragraph on page 12 as follows:

Sub B9
a
As can be ~~bee~~ be seen from the above discussion, the present invention aims at achieving an effective removal of the captured SOx, using such reducing agents as HC, CO and H₂ in the reduction atmosphere of about 500°C.

Please amend the paragraph bridging pages 18 and 19 as follows:

8v B 310

Figure 2 shows an example of the engine system equipped with exhaust gads cleaning device. The engine 99 of the present embodiment is designed as a cylinder internal jet type. Said engine is supplied with air fed through air cleaner 1 and fuel jetted from the injector 5 fed from the fuel tank 13. Air flow path is provided with an air flow sensor 2 and throttle valve 3, and the fuel flow path is equipped with a fuel pump 12. An exhaust gas cleaning catalyst 18 corresponding to the exhaust gas cleaning device of the present invention is placed in the exhaust gas flow path. An air-fuel ratio sensor 19 and exhaust gas temperature sensor 21 are installed on the upstream side of the exhaust gas clean catalyst 18. A temperature sensor 22 to measure the catalyst outlet temperature is mounted on the downstream side. Various pieces of information required for engine operations are fed to the engine control unit 25. In the present embodiment, the signals from the air flow sensor 2, throttle valve 3, load sensor 8 to measure the ratio of depressing the acceleration pedal 7, air-fuel ratio sensor 19, temperature sensors 21 and 22, water temperature sensor 28 to measure the engine water temperature and crank angle sensor 29 are sent to the engine control unit 25. Numeral 9 in Figure 2 denotes a piston, and 26 shows a knock sensor. The injector 5 and firing plug 6 are controlled by signals from the engine control unit 25.

Page 31, Table 6, last row, delete the heading type over "(Embodiment 4)" and insert the same heading "(Embodiment 4)" at the top of page 32 before line 1.

Page 35, insert the following paragraph after line 6.

The foregoing disclosure has been set forth merely to illustrate the invention and is not intended to be limiting. Since modifications of the disclosed embodiments incorporating the spirit and substance of the invention may occur to persons skilled in the art, the invention should be construed to include everything within the scope of the appended claims and equivalents thereof.

A11

Sub B11